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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,521	02/20/2004	Minoru Goda	7985/7	7165
7590 Brinks Hofer Gilson & Lione P.O. Box 10395 Chicago, IL 60610			EXAMINER TOLIN, MICHAEL A	
			ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			11/07/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/783,521

**Applicant(s)**

GODA, MINORU

**Examiner**

MICHAEL A. TOLIN

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10, 12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8, 10, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it is unclear which of the base layer, top layer and intermediary layer comprised fabric. The examiner suggests amending the claim language to more clearly indicate that the top layer and the base layer are fabric layers.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Pauly (US 735575).

Pauly teaches a method of making a three-dimensional embroidery product comprising providing a base fabric layer and a top fabric layer (a, a'), providing an intermediary layer comprising a plurality of sheets (b), embroidering a pattern through the layers of fabric with thread, cutting the intermediary layer at a height to separate the top and base layers, and removing the remaining intermediary layer (Figures 5 and 6; pages 1 and 2).

As to the claimed cutting limitation, there is no requirement in the claim that the cutting step involves cutting a single sheet between its top and bottom surfaces to split the single sheet into two pieces. The claimed cutting limitation has been interpreted as requiring no more than dividing an intermediary layer, which is clearly accomplished in Pauly by cutting between sheets (b) of the intermediary layer.

5. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Komatsu'676 (WO 03/024676 A1 referencing US 2004/0231478 as an English language equivalent).

Komatsu'676 teaches a method of making a three-dimensional embroidery product comprising providing a base fabric layer and a top fabric layer (1, 5), providing an intermediary layer comprising a plurality of sheets (5), embroidering a pattern through the layers of fabric with thread, cutting the intermediary layer at a height to separate the top and base layers, and removing the remaining intermediary layer (Figure 4; paragraphs 5 and 22-24).

As to the claimed cutting limitation, there is no requirement in the claim that the cutting step involves cutting a single sheet between its top and bottom surfaces to split

the single sheet into two pieces. The claimed cutting limitation has been interpreted as requiring no more than dividing an intermediary layer, which is clearly accomplished in Komatsu'676 by cutting between sheets (5) of the intermediary layer.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pauly as applied to claim 1 above, and further in view of Tajima (US 6263817).

Tajima is applied as in numbered paragraph 4 of the office action mailed 09 October 2007.

8. Claims 3-6, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pauly as applied to claim 1 above, and further in view of Jalowsky (US 4517910).

Jalowsky is applied as in numbered paragraph 5 of the previous office action mailed 07 July 2008.

Further regarding claims 5 and 6, while Jalowsky does not reside particular materials for the thermal fusible film, polyamide, polyester or polyurethane epoxy

compositions are generally well known for providing strong adhesion to fabrics.

Selection of a well known suitable composition for the film suggested by Jalowsky involves no more than routine experimentation in order to optimizing adhesion for the particular fabrics being used. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a film having the claimed composition because one of ordinary skill in the art would have been motivated to use well known suitable compositions for providing strong adhesion to fabrics as the film suggested by Jalowsky.

Regarding claims 12 and 13, Pauly suggests use of an adhesive or any other convenient means to secure the stitches prior to cutting (page 1, lines 68-75), but does not suggest particular adhesives. Jalowsky suggests a thermally fusible film which is bonded to an embroidered fabric prior to a cutting process (Figures 2-6; column 3, lines 40-68; column 4, lines 1-23). In using such a thermally fusible film as the adhesive suggested by Pauly, naturally heating would be performed to secure the film to the stitches prior to cutting. For example, Jalowsky indicates heating to laminate the film (column 2, lines 6-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to perform the heating step of claim 12 because one of ordinary skill in the art would have been motivated to use any known suitable adhesive as the adhesive suggested by Pauly for securing stitches prior to cutting, such as the thermally adhesive film of Jalowsky. The temperature limitation of claim 13 was addressed in numbered paragraph 5 of the previous office action.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pauly as applied to claim 1 above, and further in view of Fortuna (US 6718895).

Fortuna is applied as in numbered paragraph 6 of the office action mailed 09 October 2007.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pauly as applied to claim 1 above, and further in view of JP 2000-64183.

JP 2000-64183 is applied as in numbered paragraph 7 of the office action mailed 09 October 2007.

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pauly as applied to claim 1 above, and further in view of Komatsu'420 (US 6467420).

Claim 12 is rejected here in the alternative to provide further motivation for providing this claimed step of heating.

Pauly suggests use of an adhesive or any other convenient means to secure the stitches prior to cutting (page 1, lines 68-75). Komatsu'420 suggests the use of yarn capable of thermal fusion with a heat pressing step performed to secure an embroidery pattern prior to a cutting process (column 3, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the claimed heating step because one of ordinary skill in the art would have been motivated to secure the stitches prior to cutting in any convenient manner as suggested by Pauly, for example by providing a heating step to secure fusible yarn as suggested by Komatsu'420.

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pauly in view of Komatsu'420 as applied to claim 12 above, and further in view of Jalowsky.

While Komatsu'420 does not particular temperatures for the claimed heating step, such a temperature of 150°C (about 300°F) is typical of thermally fusible adhesives for fabrics. For example Jalowsky suggests temperatures of 250°F to 350°F and prefers a range of 250°F to 300°F (column 3, lines 1-4 and lines 59-64). Accordingly, one of ordinary skill in the art would have been expected to heat to a temperature of 150°C as a matter of routine experimentation in order to suitably activate the adhesive of Komatsu'420 in view of the range of temperatures suggested by Jalowsky. It would have been obvious to one of ordinary skill in the art at the time of the invention to heat to a temperature of 150°C because one of ordinary skill in the art would have been motivated to use adhesives known for bonding fabrics and suitable temperatures for their activation in practicing the heating step suggested by Komatsu'420 as a matter of routine experimentation in view of the temperature ranges suggested by Jalowsky.

### ***Response to Arguments***

13. Applicant's arguments filed 29 August 2008 have been fully considered but they are not persuasive.

Applicant argues that Komatsu'420 does not recite cutting the intermediary layer. To the extent that Applicant is arguing that the claims require cutting a single sheet of the intermediary layer between its upper and lower faces to split the sheet into two



pieces, as noted in the rejections above, such is not required by the claims. The claims require no more than dividing an intermediary layer into two sections. Such does not establish over dividing an intermediary layer comprising a plurality of sheets between two of the sheets. While Komatsu'420 describes such an intermediary layer comprising a plurality of sheets at column 3, lines 56-67 and column 4, lines 1-8, the examiner acknowledges that Komatsu'420 does not explicitly recite cutting between two of the sheets. Accordingly new grounds of rejection have been applied using Pauly and Komatsu'676. In view of the new grounds of rejection, this action is non-final.

### ***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL A. TOLIN whose telephone number is (571)272-8633. The examiner can normally be reached on M-F 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael A Tolin/

Patent Examiner, Art Unit 1791